[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0449; Directorate Identifier 2013-NM-259-AD; Amendment

39-18021; AD 2014-23-05]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

Model A318 series airplanes, Model A319 series airplanes, Model A320-211, -212, -214, -231, -232, and -233 airplanes, and Model A321 series airplanes. This AD was prompted by a report of a circumferential crack at the gland retaining-ring groove of certain retraction actuators on the main landing gear (MLG). This AD requires an inspection to identify the part numbers of MLG retraction actuators and replacement of certain MLG retraction actuators. We are issuing this AD to prevent MLG retraction actuator failure that could prevent the full extension and/or down-locking of the MLG, possibly resulting in MLG collapse during landing or rollout, and consequent damage to the airplane and injury to the occupants.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0449 or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Airbus, Airworthiness

Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone
+33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com;

Internet http://www.airbus.com. You may view this referenced service information at the
FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For
information on the availability of this material at the FAA, call 425-227-1221.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer,

International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus Model A318 series airplanes, Model A319 series airplanes, Model A320-211, -212, -214, -231, -232, and -233 airplanes, and Model

A321 series airplanes. The NPRM published in the <u>Federal Register</u> on July 17, 2014 (79 FR 41658).

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2013-0283R1, dated December 9, 2013 [Corrected December 11, 2013] (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

During routine pre-flight inspection of an Airbus A319, a hydraulic fluid leak was detected, coming from the retraction actuator of the main landing gear (MLG). The results of subsequent investigations revealed that a galvanic difference between materials induced an internal corrosion which was the crack initiator of the component. Actuators from 201590 series were identified as potentially affected, unless inspected and corrected during MLG overhaul.

This condition, if not detected and corrected, could lead to retraction actuator failure, preventing the full extension and/or down-locking of the MLG, possibly resulting in MLG collapse during landing or rollout and consequent damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, Airbus published Service Bulletin (SB) A320-32-1408, providing instructions to identify and replace the affected actuators that have already exceeded 20 000 flight cycles (FC) or 10 years of operation since new, or since last overhaul.

For the reason described above, EASA AD 2013-0283 was issued to require a one-time identification and replacement of each affected MLG retraction actuator.

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You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2014-0449-0002.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (79 FR 41658, July 17, 2014) or on the determination of the cost to the public.

Clarification of Costs of Compliance

We have revised the Costs of Compliance section of this AD to clarify the costs of the follow-on actions.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 41658,
 July 17, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 41658, July 17, 2014).

Costs of Compliance

We estimate that this AD affects 851 airplanes of U.S. registry.

We also estimate that it will take about 3 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$217,005, or \$255 per product.

In addition, we estimate that any necessary follow-on actions will take about 8 work-hours and require parts costing \$36,135 per MLG actuator, for a cost of \$36,845 per MLG actuator. We have no way of determining the number of aircraft that might need these actions.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
 - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov/#!docketDetail;D=FAA-2014-0449; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2014-23-05 Airbus: Amendment 39-18021. Docket No. FAA-2014-0449; Directorate Identifier 2013-NM-259-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus airplanes specified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, all manufacturer serial numbers.

- (1) Airbus Model A318-111, -112, -121, and -122 airplanes.
- (2) Airbus Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (3) Airbus Model A320-211, -212, -214, -231, -232, and -233 airplanes.
- (4) Airbus Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Reason

This AD was prompted by a report of a circumferential crack at the gland retaining-ring groove of certain retraction actuators on the main landing gear (MLG). We are issuing this AD to prevent MLG retraction actuator failure that could prevent the full

extension and/or down-locking of the MLG, possibly resulting in MLG collapse during landing or rollout, and consequent damage to the airplane and injury to the occupants.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection to Determine Part Number (P/N) and Time-in-Service

Within 18 months after the effective date of this AD: Do an inspection of each MLG retraction actuator to determine whether the actuator has P/N 201590001, 201590002, 201590002-010, 201590002-020, or 201590003; and to determine the time-in-service accumulated on actuators having those part numbers. The actuator flight cycles and calendar time are those accumulated since first installation on an airplane, or since last actuator overhaul, or since the most recent accomplishment of the actions described in Task 321147-01-1 of the Airbus A318/A319/A320/A321 Maintenance Review Board Report (MRBR), whichever occurs latest. A review of airplane delivery or maintenance records is acceptable, provided that the actuator part number and time-inservice can be conclusively identified from that review.

(h) MLG Actuator Replacement

At the applicable time specified in paragraphs (h)(1) and (h)(2) of this AD: Replace each MLG actuator having a part number identified in paragraph (g) of this AD with a new or serviceable actuator, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1408, dated July 22, 2013. The actuator flight cycles and calendar time specified in paragraphs (h)(1) and (h)(2) of this AD are those accumulated since first installation on an airplane, or since last actuator overhaul, or since doing the actions described in Task 321147-01-1 of the Airbus A318/A319/A320/A321 MRBR; whichever occurs later.

- (1) For actuators with accumulated time-in-service equal to or more than 20,000 flight cycles or 10 years as of the effective date of this AD: Within 18 months after the effective date of this AD.
- (2) For actuators with accumulated time-in-service less than 20,000 flight cycles and 10 years as of the effective date of this AD: Before the accumulation of 10 years since first installation on an airplane.

(i) MLG Actuator Replacement with Unknown Time-in-Service

Within 18 months after the effective date of this AD: Replace each MLG retraction actuator having a part number specified in paragraph (g) of this AD, and for which the in-service history is unknown, with a new or serviceable actuator, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1408, dated July 22, 2013.

(j) Exception to Paragraphs (g), (h), and (i) of this AD

An airplane that does not have Airbus Modification 26644 or Modification 150820 (for all airplane models), or Modification 27151 (for Model A321 series airplanes), applied in production, as applicable, is not affected by the requirements of paragraphs (g), (h), and (i) of this AD, provided that it can be conclusively determined that no MLG retraction actuator having a part number identified in paragraph (g) of this AD has been installed on that airplane since first flight.

(k) Parts Installation Limitation

As of the effective date of this AD, installation of an MLG retraction actuator having a part number identified in paragraph (g) of this AD is allowed, provided that the MLG retraction actuator has not accumulated or exceeded 20,000 flight cycles or 10 years since new; or 20,000 flight cycles or 10 years since last actuator overhaul.

(I) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227 1405; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(m) Special Flight Permits

Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the airplane can be modified (if the operator elects to do so), provided the MLG remains extended.

(n) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) 2013-0283R1, dated December 9, 2013 [Corrected December 11, 2013], for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2014-0449-0002.

(o) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.
 - (i) Airbus Service Bulletin A320-32-1408, dated July 22, 2013.
 - (ii) Reserved.
- (3) For service information identified in this AD, contact Airbus, Airworthiness Office EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet http://www.airbus.com.
- (4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on November 5, 2014.

Jeffrey E. Duven, Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2014-26984 Filed 11/19/2014 at 8:45 am; Publication Date: 11/20/2014]